BRUHAT BANGALORE MAHANAGARA PALIKE

YELAHANKA ZONE

Name of work:-Providing CC Road and Drain Development at Mastri Palya in Ward No 06 Tanisandra Byatarayanapura Sub Division Yelahanka Zone BBMP.

			Estimate Cost Rs.					9900000.00	
Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
1	KSRRB 300-1. Earthwork **excavation by manual means in ordinary soil** involving an average horizontal throw upto 2 meters and an average lift upto 0.5 m, excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods complete as per specifications. MORTH / Chapter 3 **Page No. 142 / Item No. 19.1, PWD SR 2018-19**								
	New RCC Drain	Cum							
	Mastri Palya Main Road from St.Anthony Church to NR Orchid Gardenia. E/s		1	298.00	1.10	0.90	295.02		
	Cross Road-1 LHS		1	60.00	0.95	0.90	51.30		
	Cross Road-2 Mastri Palya Main Road to		1	65.00	0.95	0.90	55.58		
	Approach		1	25.00	0.95	0.90	21.38		
	Cross Road-4 Mastri Palya Main Road to		1	61.00	1.10	0.90	60.39		
	Approach-1		1	30.00	0.95	0.90	25.65		
	Approach-2		1	26.00	0.95	0.90	22.23		
	Church		1	54.00	1.10	0.90	53.46		
	Cross Road-6 Mastri Palya Main Road to		1	36.00	1.10	0.90	35.64		
			1	36.00	1.10	0.90	35.64		
	Cross Road in Mastri Palya		1	90.00	1.10	0.95	94.05		
				781.00					
	for culverts		1	15.00	1.70	1.05	26.78		
			2	6.50	1.26	1.05	17.20		
			3	4.50	1.26	1.05	17.86		
							812.16	137.80	**111916.27**
	Basic Rate	130.00							
	Area Weightage @ 6%	7.80							
	Total	**137.80**							
2	KSRB 4-1.3 : Providing and laying in position plain cement concrete of mix 1:4:8 with OPC cement @ 180kgs, with 40mm and down size graded granite metal coarse aggregates @0.85cum and fine aggregates @ 0.57cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation, including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2. Page No.12, Item No. 4.3 of PWD SR 2016-17								
	New RCC Drain	Cum							
	St.Anthony Church to NR Orchid Gardenia. E/S		1	298.00	1.10	0.15	49.17		
	Cross Road-1		1	60.00	0.95	0.15	8.55		
	Cross Road-2 Mastri Palya Main Road to		1	65.00	0.95	0.15	9.26		
	Approach		1	25.00	0.95	0.15	3.56		
	Cross Road-4 Mastri Palya Main Road to		1	61.00	1.10	0.15	10.07		

	Approach-1		1	30.00	0.95	0.15	4.28		
	Approach-2		1	26.00	0.95	0.15	3.71		
	Church Road from Mastri Palya Main Road to		1	54.00	1.10	0.15	8.91		
	Cross Road-6 Mastri Palya Main Road to		1	36.00	1.10	0.15	5.94		
			1	36.00	1.10	0.15	5.94		
	Cross Road in Mastri Palya		1	90.00	1.10	0.15	14.85		
				781.00					
	for culverts		1	15.00	1.70	0.15	3.83		
			2	6.50	1.26	0.15	2.46		
			3	4.50	1.26	0.15	2.55		
							133.06	5408.12	**719623.38**
	Basic Rate	5102.00							
	Area Weightage @ 6%	306.12							
	Total	**5408.12**							
3	KSRB 4.2.2 : Providing and laying in position **reinforced cement concrete of Design mix M20** with OPC cement @ 320kgs, with 20mm and down size graded granite metal coarse aggregates @0.69cum and fine aggregtes @ 0.460 cum, with super plasticisers @ 3 liters confirming to is 9103-1999 reafirmed-2008, machine mixed, concrete laid in layers not exceeding 15 cms thick, vibrated for all works **in foundation for footings, pedastals, retaining walls, return walls, walls (any thickness) including attached pilasters, columnspillars, posts, struts, buttresses, bed blocks, anchor blocks & plinths etc.,** including cost of all materials, labour, HOM of machinery, curing, complete but excluding cost of reinforcement as per specifications. Specification No. KBS 4.1, 4.6 **Page No. 12, Item No. 4.11, PWD SR 2016-17**										
	New RCC Drain	Cum							
	Mastri Palya Main Road from St.Anthony Church to NR Orchid Gardenia.		1	298.00	0.90	0.15	40.23		
	Cross Road-1		1	60.00	0.75	0.15	6.75		
	Cross Road-2 Mastri Palya Main Road to Dead End .		1	65.00	0.75	0.15	7.31		
	Approach		1	25.00	0.75	0.15	2.81		
	Cross Road-4 Mastri Palya Main Road to Dead End		1	61.00	0.90	0.15	8.24		
	Approach-1		1	30.00	0.75	0.15	3.38		
	Approach-2		1	26.00	0.75	0.15	2.93		
	Church Road from Mastri Palya Main Road to		1	54.00	0.90	0.15	7.29		
	Cross Road-6 Mastri Palya Main Road to		1	36.00	0.90	0.15	4.86		
			1	36.00	0.90	0.15	4.86		
	Cross Road in Mastri Palya		1	90.00	0.90	0.15	12.15		
				781.00					
	for culverts		1	15.00	1.50	0.20	4.50		
			2	6.50	1.06	0.20	2.76		
			3	4.50	1.06	0.20	2.86		
	Walls								
	Mastri Palya Main Road from St.Anthony Church to NR Orchid Gardenia. E/s		2	298.00	0.15	0.60	53.64		
	Cross Road-1		2	60.00	0.15	0.60	10.80		
	Cross Road-2 Mastri Palya Main Road to Dead End .		2	65.00	0.15	0.60	11.70		

	Approach		2	25.00	0.15	0.60	4.50		
	Cross Road-4 Mastri Palya Main Road to Dead End		2	61.00	0.15	0.60	10.98		
	Approach-1		2	30.00	0.15	0.60	5.40		
	Approach-2		2	26.00	0.15	0.60	4.68		
	Church Road from Mastri Palya Main Road to Church		2	54.00	0.15	0.60	9.72		
	Cross Road-6 Mastri Palya Main Road to Dead End		2	36.00	0.15	0.60	6.48		
			2	36.00	0.15	0.60	6.48		
	Cross Road in Mastri Palya		2	90.00	0.15	0.60	16.20		
				781.00					
	for culverts		2	15.00	0.30	0.75	6.75		
			4	6.50	0.23	0.75	4.49		
			6	4.50	0.23	0.75	4.66		
							267.39	5998.54	**1603952.61**
	Basic Rate	5659.00							
	Area Weightage @ 6%	339.54							
	Total	**5998.54**							
4	KSRB4-6.4:Providing and removing **centering, shuttering, strutting, propping** etc., and removal of form work for **vertical surface such as walls at any thickness**, including attached pilasters, buttresses, plinth cills and string courses cost of all materials, labour complete as per specifications. Specification No. KBS 4.6.2 **Page No. 15 / Item No. 4.31 PWD SR 2018-19**								
		Sqm							
	Mastri Palya Main Road from St.Anthony Church to NR Orchid Gardenia.		4	298.00		0.60	715.20		
	Cross Road-1		4	60.00		0.60	144.00		
	Cross Road-2 Mastri Palya Main Road to Dead End		4	65.00		0.60	156.00		
	Approach		4	25.00		0.60	60.00		
	Cross Road-4 Mastri Palya Main Road to Dead End		4	61.00		0.60	146.40		
	Approach-1		4	30.00		0.60	72.00		
	Approach-2		4	26.00		0.60	62.40		
	Church Road from Mastri Palya Main Road to Church		4	54.00		0.60	129.60		
	Cross Road-6 Mastri Palya Main Road to Dead End		4	36.00		0.60	86.40		
			4	36.00		0.60	86.40		
	Cross Road in Mastri Palya		4	90.00		0.60	216.00		
	for culverts		4	15.00		0.75	45.00		
			8	6.50		0.75	39.00		
			12	4.50		0.75	40.50		
							1998.90	**379.48**	**758542.57**
	Basic Rate	358.00							
	Area Weightage @ 8%	21.48							
	Total	**379.48**							

	KSRB4.9.:Providing **T.M.T steel reinforcement for R.C.C work** including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications. Specification No. KBS 4.6.3 **- TMT bars Fe 500 Page No. 17 / Item No. 4.46.2, PWD SR 2018-19**								
		Tonne							
	Cosidering 60 kgs for Drain Per / Cum		1	241.38		0.057	13.76		
	Cosidering 75 kgs for Drain Per / Cum		1	26.01		0.070	1.82		
							15.58	75223.96	**1171941.15**
	Basic Rate	70966.00							
	Area Weightage @ 6%	4257.96							
	Total	**75223.96**							
6	**Providing precast slab of 10mm thick** including cost of all materials, labour, curing, transportation, loading unloading, etc.,complete as per the direction of engineer in charge - **(Data rate Approved).**								
	Mastri Palya Main Road from St.Anthony Church to NR Orchid Gardenia.	sqm	1	298.00	0.75		223.50		
	Cross Road-1		1	60.00	0.75		45.00		
	Cross Road-2 Mastri Palya Main Road to		1	65.00	0.75		48.75		
	Approach		1	25.00	0.75		18.75		
	Cross Road-4 Mastri Palya Main Road to Dead End .		1	61.00	0.90		54.90		
	Approach-1		1	30.00	0.75		22.50		
	Approach-2		1	26.00	0.75		19.50		
	Church Road from Mastri Palya Main Road to		1	54.00	0.90		48.60		
	Cross Road-6 Mastri Palya Main Road to		1	36.00	0.90		32.40		
			1	36.00	0.90		32.40		
	Cross Road in Mastri Palya		1	90.00	0.90		81.00		
				781.00			**627.30**	2100.00	**1317330.00**
	Basic Rate	2100.00							
7	**Providing precast slab of 250mm thick** including cost of all materials, labour, curing, transportation, loading unloading, etc.,complete as per the direction of engineer in charge - **(Data rate Approved).**								
		Sqm							
	for culverts		1	15.00	1.50		22.50		
			2	6.50	1.20		15.60		
			3	4.50	1.20		16.20		
	Apporved data rate						**54.30**	5418.00	**294197.40**
8	KSRRB M200-24. Dismantling of cement concrete pavement by mechanical means using pneumatic tools, breaking to pieces not exceeding 0.02 cum in volume and stock piling at designated locations and disposal of dismantled materials stacking serviceable and unserviceable materials seperately complete as per specifications. MORTH Specification No. 202 **Page No. 138, Item No. 18.47, PWD SR 2018-19**								
	for Damaged CC Road								
	Mastri Palya Main Road from St.Anthony Church to NR Orchid Gardenia.								
	Cross Road-1		1	60.00	3.65	0.20	43.80		

	Cross Road-4 Mastri Palya Main Road to Dead End .		1	61.00	4.00	0.20	48.80		
	Church Road from Mastri Palya Main Road to		1	54.00	3.70	0.20	39.96		
							132.56		
	Deduction 40%for Damage						53.02		
							79.54	942.34	**74949.95**
	Basic Rate	889.00							
	Area Weightage @ 0%	53.34							
	Total	**942.34**							
9	Excavation in Soil using Hydraulic Excavator CK 90 and Tippers with Disposal KSRRB M300-14. Excavation for roadwork in soil with hydraulic excavator of 0.9 cum bucket capacity including cutting and loading in tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transporting to the embankment location and complete as per specifications. MORTH Specification No.**301Page No. 143, Item No. 19.14, PWD SR 2018-19**								
	For Damage portion	**cum**							
	Cross Road-1		1	60.00	3.65	0.30	65.70		
	Cross Road-2 Mastri Palya Main Road to Dead End .		1	65.00	3.75	0.30	73.13		
	Approach		1	25.00	4.00	0.30	30.00		
	Cross Road-3		1	42.00	3.50	0.30	44.10		
	Cross Road-4 Mastri Palya Main Road to Dead End .		1	61.00	4.00	0.30	73.20		
	Approach-1		1	30.00	3.00	0.30	27.00		
	Approach-2		1	26.00	2.50	0.30	19.50		
	Cross Road-5 Mastri Palya Main Road to		1	35.00	3.00	0.30	31.50		
	Church Road from Mastri Palya Main Road to		1	54.00	3.70	0.30	59.94		
	Church Surrounding		1	37.00	3.40	0.30	37.74		
	Cross Road-6 Mastri Palya Main Road to Dead End .		1	23.00	3.50	0.30	24.15		
							485.96	43.46	**21119.60**
	Basic Rate	41.00							
	Area Weightage @ 6%	2.46							
	Total	**43.46**							
10	KSRRB M600-1. Construction of dry lean cement concrete mix CC1:5:10 with OPC cement @160Kgs, with 25mm and down size graded granite metal coarse aggregate at 0.86cum and fine aggregates @ 0.58cum Sub- base over a prepared sub-grade with (coarse and fine aggregate conforming to IS: 383) aggregate cement ratio not to exceed 15:1. Aggregate gradation after blending to be as per Table 600-1, cement content not to be less than 160 kg/ cum, optimum moisture content to be determined during trial length construction, concrete strength not to be less than 10 Mpa at 7 days, mixed in a batching plant, transported to site, laid with a paver with electronic sensor, compacting with 8-10 tonnes vibratory roller, finishing and curing complete as per specifications. . MORTH Specification No. Page No.**143, Item No. 22.1.2, PWD SR 2018-19**								
	For CC Road	**cum**							
	Cross Road-1		1	60.00	3.65	0.15	32.85		
	Cross Road-2 Mastri Palya Main Road to Dead End .		1	65.00	3.75	0.15	36.56		
	Approach		1	25.00	4.00	0.15	15.00		
	Cross Road-3		1	42.00	3.50	0.15	22.05		
	Cross Road-4 Mastri Palya Main Road to Dead End .		1	61.00	4.00	0.15	36.60		

	pproach-1		1	30.00	3.00	0.15	13.50		
	Approach-2		1	26.00	2.50	0.15	9.75		
	Cross Road-5 Mastri Palya Main Road to Dead End .		1	35.00	3.00	0.15	15.75		
	Church Road from Mastri Palya Main Road to Church		1	54.00	3.70	0.15	29.97		
	Church Surrounding		1	37.00	3.40	0.15	18.87		
	Cross Road-6 Mastri Palya Main Road to Dead End		1	23.00	3.50	0.15	12.08		
							242.98	3884.90	**943943.29**
	Basic Rate	3665.00							
	Area Weightage @ 8%	219.90							
	Total	**3884.90**							
11	KSRRB M600-6: **cement concrete pavement,** construction unreinforced plain cement concrete pavement, thickness as per design, over a prepared sub base with 43 grade cement or any other type as per clause 1051.2.2M20/M30 at 380/450 kg per cum, coarse and fine aggregate conforming to IS: 383, maximum size of coarse aggregate not exceeding 25mm, mixed in a concrete mixer of not less than 0.6 cum capacity and appropriate weigh batcher as per approved mix design, laid in approved fixed side form work (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including leveling the form work as per drawing,), spreading the concrete with shovels, rackers compacted using needle, scred and plate vibrator and finished in a continuous operation including provision of contraction, expansion, construction and longitudinal joints, joint filler, separation membrane, selant primer, joint sealant, admixtures as approved curing compound, finishing to lines and grade as per drawing complete as per specification , , **No. 161/ Item No. 22.6/ PWD SR 2018-19**									
	For CC Road								
	Cross Road-1		1	60.00	3.65	0.15	32.85		
	Cross Road-2 Mastri Palya Main Road to Dead End .		1	65.00	3.75	0.15	36.56		
	Approach		1	25.00	4.00	0.15	15.00		
	Cross Road-3		1	42.00	3.50	0.15	22.05		
	Cross Road-4 Mastri Palya Main Road to Dead End .		1	61.00	4.00	0.15	36.60		
	Approach-1		1	30.00	3.00	0.15	13.50		
	Approach-2		1	26.00	2.50	0.15	9.75		
	Cross Road-5 Mastri Palya Main Road to Dead End .		1	35.00	3.00	0.15	15.75		
	Church Road from Mastri Palya Main Road to Church		1	54.00	3.70	0.15	29.97		
	Church Surrounding		1	37.00	3.40	0.15	18.87		
	Cross Road-6 Mastri Palya Main Road to Dead End		1	23.00	3.50	0.15	12.08		
							242.98	5210.96	**1266146.03**
	Basic Rate	4916.00							
	Area Weightage @ 6%	294.96							
	Total	**5210.96**							
12	Lead for Disposal of Debris shall be payable at carage rates by Mechanical means inlcuding loading and unloading. From 0.00 to 2.00 Km (								
		cum	Qty. Vide Item No. (1+8+9)				**1377.66**		
							1377.66	73.99	**101932.73**

	Basic Rate Lead Charges Upto 10.00 Kms	12.80							
	PWD SR 2018-19 (P.130/I.17.1) For loading	57.00							
	Area Weightage @ 6%	3.42							
	Total	**73.22**							
							Sub Total		8385594.99
	Add For 12% Applicable GST								1006271.40
	Add 1% DPR Charges								83855.95
	Add 1% for PMC Charges								83855.95
	Add KRIDL 4% charges								335423.80
	Miscesallaneous Charges							L/S	4997.91
							Grand Total Rs		9900000.00
	(Rupees Ninety nine Lakhs only)								

CERTIFICATE

1 The work spot has been inspected and the work is found necessary.
2 This estimate is prepared as per PWD SR of 2018-19
3 The provisions were made in this estimate are necessary and adequate.
4 This works come under B.B.M.P. limits.

Assistant Engineer
ward no.06

Assistant Executive Engineer
Byatarayanapura
Sub Division

Executive Engineer
Byatarayanapura Division
Bruhat Bangalore Mahanagara Palike

ADMINISTRATIVE APPROVAL
Accorded For Rs. 99.00 Nine Lakhs only
Head of A/c. P3727, SC-SP/TSP
Div. Ref. No. 75 Date 24-10-19
AE 24/10
EE(BTP) 24/10

Technical Sanction
Accorded For Rs 99.00 Lakhs only
Head of A/C P3727
CER NO : 153 Dt: 28.10.2019
TA CE (YNK)